

# EXPLORING THE IMPACT OF THE IMPLEMENTATION OF A WEBQUEST FOR LEARNING ENGLISH IN A $5^{\rm TH}$ GRADE CLASSROOM OF A PUBLIC SCHOOL IN PEREIRA RISARALDA

MARILUZ GRISALES OROZCO
MAITHYA XUNDARA MORA MARIN

UNIVERSIDAD TECNOLÓGICA DE PEREIRA FACULTAD DE BELLAS ARTES Y HUMANIDADES LICENCIATURA EN LENGUA INGLESA PEREIRA 2011

## EXPLORING THE IMPACT OF THE IMPLEMENTATION OF A WEBQUEST FOR LEARNING ENGLISH IN A $5^{\rm TH}$ GRADE CLASSROOM OF A PUBLIC SCHOOL IN PEREIRA RISARALDA

## MARILUZ GRISALES OROZCO MAITHYA XUNDARA MORA MARIN

Trabajo de grado presentado como requisito parcial para obtener el título de Licenciado en Lengua Inglesa

Asesor:

Rosa María Guilleumas García

UNIVERSIDAD TECNOLÓGICA DE PEREIRA FACULTAD DE BELLAS ARTES Y HUMANIDADES LICENCIATURA EN LENGUA INGLESA PEREIRA 2011

## **NOTA DE ACEPTACION**

Firma del jurado
i iiiia doi jarado
Firma del Asesor de Trabajo de
Grado

## **DEDICATION**

- To God who is source of wisdom, patience, and infinite love.
- To our mothers who with love, dedication and tireless effort led us every day towards achieving this dream.

#### **ACKNOWLEDGEMENTS**

- The process of carrying out this Project was possible thanks to the help and support of a number of people.
- We would like to thank our advisor Rosa María Guilleumas who patiently guided us through each step of the project.
- Our gratitude also goes to everyone who participated in our study, the 5<sup>th</sup> grade students and teacher. Without them, this project would not exist.
- Finally, we would like to express our deepest love to our family and friends.
   Their love, support, confidence and constant encouragement during our difficult times allowed us to overcome many obstacles during our project writing stage.

#### **RESUMEN**

El propósito de este estudio fue explorar el impacto de la implementación de una WebQuest para el aprendizaje del inglés en un aula de grado 5° de una escuela pública en Pereira, Risaralda.

Seis estudiantes utilizaron la WebQuest "Exploring the Matecaña Zoo", diseñada por las investigadoras, como estrategia de aprendizaje para practicar, mejorar y desarrollar su competencia comunicativa en inglés, teniendo como apoyo el uso de recursos de internet y la facilitación de las docentes durante el proceso de enseñanza-aprendizaje.

Uno de los objetivos del estudio fue documentar las reacciones y las percepciones de los estudiantes sobre el uso de esta estrategia de enseñanza y aprendizaje, incluyendo las ventajas y desventajas derivadas de la utilización de la WebQuest. Para ello se realizaron observaciones participantes, entrevistas abiertas y un diario de campo de las investigadoras.

Otro propósito de este estudio tuvo que ver con la idea de establecer el nivel de competencia comunicativa en Inglés de los participantes antes y después de participar en el Proyecto de la Webquest, con el fin de determinar el impacto de esta estrategia en el desempeño de los estudiantes en el área de inglés. Para ello, las pruebas iniciales y finales se llevaron a cabo.

El estudio empleó técnicas tanto cualitativas como cuantitativas en el análisis de datos con el fin de responder a dos preguntas de investigación que implicaron la documentación y el análisis de la estrategia de instrucción, los resultados de aprendizaje de los estudiantes y sus reacciones y percepciones en relación con el uso de la WebQuest para aprender inglés.

El análisis de los datos arroja los siguientes resultados

1. Que la WebQuest tuvo un impacto positivo en el desarrollo de las habilidades orales y escritas en inglés.

- 2. Respuesta entusiasta de los estudiantes hacia el aprendizaje del inglés utilizando una WebQuest.
- 3. Que los estudiantes consideraron la webquest como una estrategia interesante y motivadora.
- 4. Que la WebQuest promovió el trabajo colaborativo de los estudiantes.

En este sentido, el presente estudio hace recomendaciones pedagógicas para la implementación de WebQuests en las aulas de inglés como lengua extranjera y continuar la investigación en relación con esta estrategia.

#### **ABSTRACT**

The purpose of this study was to explore the impact of the implementation of a WebQuest for learning English in a 5th grade classroom of a public school in Pereira Risaralda.

Six students used the WebQuest "Exploring the Matecaña Zoo", designed by the researchers as a learning strategy to practice, improve and develop their communicative competence in English, having as support the use of Internet resources and the facilitation of teachers during the teaching-learning process.

One of the objectives of the study was to document the reactions and perceptions of students towards the use of this teaching and learning strategy, including the advantages and disadvantages they found from the WebQuest. For this purpose, participant observations, open-ended interviews and field notes were conducted.

Another purpose that guided this study had to do with the idea of establishing the students' level of communicative competence in English before and after participating in the Webquest Project, in order to determine the impact of this strategy on students' proficiency in English. For this purpose, initial and final tests were implemented.

The study used both qualitative and quantitative techniques to data analysis in order to answer two research questions that involved the documentation and analysis of the instructional strategy, participants' learning outcomes and their reactions and perceptions regarding with the use of the WebQuest for learning English.

Data analysis shows the following results:

1. Positive impact of the WebQuest strategy on the development of writing and oral skills in English.

- 2. The WebQuest as an interesting and motivating strategy.
- 3. The WebQuest as a trigger for students' collaborative work.
- 4. Enthusiastic response of students towards learning English using a WebQuest.

This way, this study makes teaching implications for implementing WebQuests in the EFL classrooms and for further research on this topic.

## **TABLE OF CONTENTS**

1.	INTRODUCTION	11
2.	STATEMENT OF THE PROBLEM	13
3.	RESEARCH QUESTIONS	16
4.	LITERATURE REVIEW AND RELEVANT CONCEPTS	
5.	METHODOLOGY	31
6	6.1 CONTEXT	31
5	5.2 Participants	
5	5.3 INSTRUCTIONAL DESIGN	
	5.3.1 Description of the WebQuest "exploring the Matecaña zoo"	34
5	5.4 METHODS FOR DATA COLLECTION	
	5.4.1 Field notes:	
	5.4.2 Observations:	
	5.4.3 Interviews:	
	5.4.4 Initial test:	
	5.4.5 Final test:	
5	5.5 Role of the researchers:	47
6.	DATA ANALYSIS	48
7.	FINDINGS AND DISSCUSSION	50
	7.1 Positive impact of the WebQuest strategy on the development of writing and oral	
S	SKILLS IN ENGLISH	50
7	7.2 THE WEBQUEST AS AN INTERESTING AND MOTIVATING STRATEGY	
7	7.3 THE WEBQUEST AS A TRIGGER FOR STUDENTS' COLLABORATIVE WORK	64
7	7.4 ENTHUSIASTIC RESPONSE OF STUDENTS TOWARDS LEARNING ENGLISH USING A WEBQUEST.	69
8.	LIMITATIONS OF THE STUDY AND RESEARCH IMPLICATIONS	77
9.	TEACHING IMPLICATIONS	79
10.	CONCLUSIONS	82
11.	REFERENCES	84
12.	APPENDICES	88
A	APPENDIX A: STUDENTS' INTERVIEW AT THE BEGINNING OF THE STUDY	88
	APPENDIX B: STUDENTS' INTERVIEW IN THE MIDDLE OF THE STUDY	
A	APPENDIX C: STUDENTS' INTERVIEW AT THE END OF THE STUDY	89

#### 1. INTRODUCTION

The twenty first century has brought new challenges and demands in our society. Every day, these challenges have proven that population requires a higher level of competitiveness to accomplish their goals successfully in this globalized world. Hence, using technological resources as the internet and computers has become crucial for the attainment of a complete process in education.

This study aimed at exploring the impact of the implementation of a WebQuest for learning English in a 5<sup>th</sup> grade classroom of a public school in Pereira, Risaralda. With the purpose of accomplishing that objective, the researchers attempted to find the students' reactions and perceptions towards using this teaching and learning strategy to learn English as well as the influence of the WebQuest on the development of their communicative abilities.

This study is structured in different sections:

The first section, statement of the problem, describes the purpose that the Ministry of National Education stated in its "National Bilingual Program 2004- 2019" for developing in Colombian school- age children the mastery of English as a second language. Then the literature review exposes the theoretical foundations that are relevant and related to the current study, including different authors' ideas about the advantages of including technological resources as the WebQuest in the teaching and learning process of English.

The next section introduces the research questions which guided the application and development of this study.

The methodology section gives some detailed insights about the context in which this study was carried out and the participants of the study, who were six 5<sup>th</sup> graders from a public school in Pereira, Risaralda. In this section, the methods used to collect the data. The researchers' role and the instructional design are

introduced and described. The data collection methods used in this study were: open- ended interviews, participant observations, field notes and an initial and final test. At the end of this section, it is also explained how the process of data analysis was carried out to generate the findings.

Consequently, the findings that the data analysis produced are presented. These findings were divided into some categories that are explained in the data analysis section. The findings of this study allowed to suggest some pedagogical implications in the teaching and learning process of English and to suggest as well as some implications that might enable further research on the topic.

To close, a general conclusion is provided followed by the list of references that compose the theoretical foundations of this study.

#### 2. STATEMENT OF THE PROBLEM

The Ministry of National Education in its "National Bilingual Program 2004- 2019" established as a competitiveness strategy, the mastery of English as a second language among Colombian school- age children. The MEN argues that English contributes to the training of a competitive country and to the improvement of its citizens' life quality. The "Programa Nacional de Bilinguismo" establishes standards and developmental levels of competences that Colombian students must have achieved at the different educational levels.

At the same time, the outcomes of the National Test applied by the "Instituto Colombiano para el fomento de la Educación Superior" (ICFES) show a great deficit in public school students' communicative competences in English along years. The results from ICFES 2006 confirmed that public schools achieved positive results in Mathematics and Language, but a great failure in the English tests. According to these data, it is possible to affirm that, in general, public school students are reaching the upper grades of secondary education with a large insufficiency in English. In other words, students are being promoted to higher levels of education with a significant gap in their English language competences. In this sense, it is evident the necessity to implement new pedagogical approaches in the teaching and learning processes of English that may contribute to the acquisition and development in the different levels of Colombian education.

On this respect, experts as Quito Sarmiento (2009) states that the use of information and communication technologies (ICT) in the teaching – learning processes of English has beneficial effects upon motivation, cognitive and communicative development, autonomy, creativity and cooperative work. Moreover, this author affirms that the changes in society that the evolution of ICT has brought demand that students develop technological skills that enable them to think critically, analyze information, communicate, collaborate, and solve problems. According to Michael B. Eisenberg and Doug Johnson (2003), Recent publications by educational associations are advocating for a more meaningful use of

technology in schools (ISTE, 2000). They are advocating integrating computer skills into the content areas, in order to help students learn to apply computer skills in meaningful ways. At the same time, the general guidelines for technology education provided by the Colombian Ministry of National Education state that students from primary school should use information and communication technology for the development of different activities (communication, entertainment, learning, research, etc) as well as use different information resources and media to support different ideas about any topic.

Additionally, the MEN (2003), considers a focal point the use and understanding of new technologies for the teaching- learning processes of English in Colombia. From this perspective, the new demands of the MEN require teachers to create new educational environments that involve the use of technology in the English language classrooms. Some audiovisual media such as television, video, cassette and others have been tools widely used by English teachers to attempt to bring the reality of English language into the classroom. However, in recent times the computer has emerged in the educational field to offer interesting resources that contribute to a more active and motivating learning thanks to its interactive and lively tools. Nowadays, computers are seen as a useful aid to enhance both learner's motivation and their access to authentic resources up to date in the foreign language.

Furthermore, one of the MEN's goals for the "Programa Nacional de Bilingüismo" is enhancing the teaching and learning of English trough the use of media and technologies of information and communication. Thus, to achieve this purpose, it is important to create consciousness among educators about the importance of integrating the internet and computers within the English instruction, in order to build new educational spaces that strengthen the learning process of English as a foreign language that may help increase the communicative skills in the target language.

On the other hand, computers provide access to a massive diversity of information that is presented not only as text but also as images and sounds,

hence its enormous opportunities and benefits as resources for teaching English. In this sense, integrating the technological, pedagogical and human resources in the teaching-learning process of English would facilitate addressing students' needs and interests towards language learning. Therefore, the incorporation of the internet and computers in the educational process opens the possibility that students achieve the required level of English communicative competences.

An interesting teaching strategy that allows combining English and technology is the WebQuest. As Pérez Torres (2006) explains in her Ph.D. thesis, the WebQuest is a constructivist learning activity, based on tasks and learning content to carry out a project fostering interdisciplinary work. According to this author, a WebQuest constitutes a practical activity that contributes to meaningful learning. In it, knowledge is constructed by the student through investigation and transformation of information with the scaffolding provided by the teacher and the purpose is to perform a final task that resembles real life tasks or processes.

Although, there are numerous research works done in foreign contexts about the use of WebQuests for teaching and learning English, very scarce investigation have been done in the Colombian contexts, especially in the public schools. For this reason, our main purpose was to explore the impact of the implementation of the "Matecaña zoo WebQuest" for learning English in a 5<sup>th</sup> grade classroom of a public school in Pereira Risaralda.

#### 3. RESEARCH QUESTIONS

In order to explore the impact of learning English using a webQuest, we pose the following research questions:

- What is the impact of the implementation of a WebQuest on the development of communicative abilities in English language with 5<sup>th</sup> grade students of a public school in Pereira Risaralda?
- What are the student's perceptions and reactions about the implementation of a WebQuest for learning English?

#### 4. LITERATURE REVIEW AND RELEVANT CONCEPTS

This study investigates the impact of a WebQuest on the development of communicative competences in English with fifth grade students.

During this review of literature, a variety of relevant concepts and research studies were examined that contributed to our research project such as Multimedia, Computer Assisted Language Learning (CALL), Computer Assisted Instruction (CAI), WebQuest, Motivation, Collaborative Work and language learning.

According to Zlatkovska, (2010), the introduction of technology in the class is especially remarkable considering the impact that computers and the Internet have on the new generations of students entering the education system.

Zlatkovska refers to Oblinger (2003) with the purpose of explaining that the "Millennial generation", generally defined as students born after 1982, differs from previous generations in specific characteristics: these new students are attracted by group activity and are captivated by new technologies. For instance, they are actively engaged on the Internet playing videogames and chatting, events which do not coincide with the traditional teaching sessions practiced by older generations of teachers in most classrooms.

Zlatkovska (2010) argues that the rapid spread of technology and continuous societal change, requires that people of the actual society have the capacity to analyze, solve problems, think critically, and take initiative and responsibility for his or her learning and decision making. In this sense, teachers nowadays need to consider this fact when preparing to teach the newest generations of students. It means teachers' responsibility to combine technology and content in a way that stimulate the kind of development that prepares students for the future in which they will be living.

#### Multimedia

One of the most important changes that computers bring into the classroom is the possibility of using Multimedia, or what is the same, integrating text, sound and graphic elements.

In education, multimedia tools have been used to design courses for computerized learning; also, multimedia has been used with students and teachers in order to improve their training and therefore, the quality of their education (Almekhlafi, 2006). In that sense, multimedia is effective to language learning since it allows bring into the classroom different stimuli (visual and aural) as well as real materials and situations that give a feeling of the target language. This contact with reality necessarily must enhance the teaching-learning process. Multimedia is somehow similar to the relational manner of human thinking and for this reason has great potential to support learning. Therefore, it is important to develop pedagogy and methodology related to multimedia learning software.

Almekhlafi (2006) on his study about effect of Computer Assisted Language Learning (CALL) on elementary-prep school students' improvement in English as a foreign language (EFL) cited authors as Volk, 2000; Gentile, Lonberger, Parana, & West, 2000; Chester, 2001; Schnackenberg, Luik, Nisan, & Servant, 2001; & Berlin & White, (2002) who defend that research on the use of multimedia in teacher education has highlighted the importance of implementing technology in teacher training courses.

### Computer Assisted Language Learning (CALL)

The use of computers in the classroom with the aim of improving language learning is known as Computer Assisted Language Learning (CALL) and it constitutes a very fruitful and promising field in the Language Learning research area. Its potential for learning and teaching in the field of foreign languages has been discussed and documented by many researchers Crosby, 1997; Peterson, 1998; Charischak, 2000; Vrtacnik et al., 2000; Ayres, 2002; Nesselhauf & Tschichold, 2002; Egbert, Paulus, & Nakamichi, 2002; Robert, 2002; Cushion & Dominique, 2002; Schwienhorst, 2002; Jung, 2002; Bayraktar, 2002; Chikamatsu, 2003; Fenfang, 2003, as cited by Almeklafi (2006).

CALL is essentially the use of computers as a part of a language course. For many years, computers have been used by language teachers with the purpose of providing supplemental exercises for further language practice. This use of computers is known as CAI (computer assisted instruction).

In recent times, as a result of technology advancement, teachers began to consider the use of computers as a fundamental component of foreign language teaching and learning. Peterson (1998) carried out a research study in the University of Western Tokyo to investigate the ways in which the subjects managed their L2 interaction during task-based discourse, using four task types (information-gap, jigsaw, decision-making and opinion-exchange).

The project was an EFL class, focused on the development of English skills through interaction. The participants were volunteers and consisted of 14 second and third year undergraduates majoring in English. In this study special attention was paid to the use of CALL in foreign languages teaching and learning; and this increase of interest in both CALL and educational technology in general, was also noticeable in the raise in the number of CALL facilities created within universal schools.

As computer technology has advanced and become more user–friendly, greater attention has been paid to its potential benefits in second language classrooms Kim, & Rissel, (2008). The implementation of computer – assisted instruction (CAI) in English teaching and learning practices, as said by Green (2005) can provide the students with new learning opportunities and new learning environments, supplying the students with plentiful language learning experiences. Additionally, Green (2005) reveals that the learning environments provided by computer – assisted instruction promote active interaction, continuous practice and significant development of the language skills.

According to the Access Center and the U.S Department of Education, Office of Special Education Programs, Computer Assisted instruction (CAI) refers to a type of instruction presented on a computer. Computers offer a variety of off line and online programs which are interactive and can illustrate a concept through attractive animation, sound and demonstration. Computer Assisted Instruction enhances teacher's instruction in several ways.

On the one hand it allows students to progress at their own rhythm and work individually or solve a problem in a group. On the other hand, it allows students to know how proficient they are on different tasks through an immediate feedback. As said by the Access Center and the U.S Department of Education, Computer Assisted instruction is a way by which teachers can capture the student's attention and desires to learn due to the possibility of offering a diversity of interactive programs.

Green (2005) states that using CAI in ESL classrooms could be a helpful complement to traditional ESL teaching practices when teachers are trying to support students in the active development of the communicative skills. The implementation of computers in language instruction offers a great deal of language experiences and a variety of opportunities that allow ESL learners active

practice, development and improvement of the English language. Although, the use of technology in the second language classroom has many benefits, it is still a process that requires more improvement with regard to the low level of competence of English teachers in relation with the integration of these tools in the classroom. (Fedisson & Braidic, 2007).

#### Importance of appropriate methodology and tool selection for the classroom

Kim & Rissel (2008) state that one of the main aims of using computers in language learning is to create environments for promoting students' participation and generate authentic contexts for interaction and also the negotiation of meaning.

Thus methodology plays a vital role in teaching since it determines the activities and teaching strategies and helps to create the learning environment that will allow successful learners' interaction. For optimum acquisition of a second language students should be involved in comprehensible and authentic communication between learners in the second language.

The role and commitment of English language teachers is becoming more crucial as they are expected to integrate technology in their instruction. Pino (2003) examines the strengths and limitations involved in learners' second language acquisition of English through a web-based instruction. In his work, Pino (2003) referencing Arnette's (2000) work, highlights the importance of creating comfortable and successful environments in the teaching-learning process as well as considering the students' individual learning styles, something that technology can simplify and make possible.

At the same time, others authors as Fedisson & Braidic (2007) investigated on the measure of the attitudes and achievement of students when comparing traditional methods of teaching versus the use of an overhead LCD projector in conjunction with power point presentation. In this study, the participants were seventh grade students which were tested on their knowledge of sentences and nouns in a language arts classroom. The classes involved 28 males and 31 females. All students were Caucasian with the exception of two African-American males. Students were predominantly from middle class families. All three classes were grouped heterogeneously.

The authors found that technology has changed the way educators think about teaching and the way students think about learning. Generally, the use of this resource in the classroom is favored by students and teachers, because it improves linguistic performance when the application directly supports the curriculum standards being assessed. It has also been acknowledged that the purpose of technology inside the classroom is significant, and that it can be developed according to the individual perspectives given for both teachers and students, respecting their thoughts and ideas. In this sense, using computers as a tool for teaching English, can allow English learners to be proficient and to develop good attitudes towards the target language.

#### WebQuests

The father of WebQuests Bernie Dodge defined a WebQuest as "an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the internet". Bernie Dodge created the WebQuest strategy in 1995 at San Diego University (March, 2005). According to March (2005), "WebQuests were created to help teachers integrate the power of the Web with student learning".

According to Prapinwong (2008), once the popularity of WebQuests extended, a question arose as to what exactly constituted WebQuests. In effect, the original definition failed to capture the meaning and theoretical foundations of the WebQuest concept. Then, the co-creator of WebQuests Tom March, at San Diego

State University, reinterpreted and elaborately defined the WebQuest model in the following way:

"A WebQuest is a scaffolded learning structure that uses links to essential resources on the World Wide Web and an authentic task to motivate students' investigation of a central, open-ended question, development of individual expertise and participation in a final group process that attempts to transform newly acquired information into a more sophisticated understanding. The best WebQuests do this in a way that inspires students to see richer thematic relationships, facilitate a contribution to the real world of learning and reflect on their own metacognitive processes"

Prapinwong (2008) states that this new definition of WebQuests reflects an educational point of view that gives emphasis to authentic learning, scaffolding, inquiry and collaborative processes. These concepts highlight the new paradigm in education, which has changed from a direct teaching, lecture-based approach to a more open-ended, learner-centered paradigm for learning (Prapinwong (2008).

King (2003), considers that WebQuest lessons are available for all levels of learners, from primary school to the university level and that "the open- ended nature of WebQuests allows teachers to design a variety of contents and tasks to fit the needs of their students".

The WebQuest model follows a regular format that includes six main components: introduction, task, process, resources, evaluation, and conclusion.

- The introduction part provides background information and motivational scenarios like giving students roles to play. It also provides an overview of the learning goals to students.
- The task is a formal description of what students will have accomplished by the end of the Webquest.

- The process guides the learner step-by-step to complete the task by using online resources.
- The resources consist of a list of websites that students will need to complete the task.
- The evaluation is usually constructed in the form of rubrics focused on both the process and the product of learning in relation to a particular lesson.
- The conclusion allows for reflection by the students and summation by the teacher".

The six components of WebQuests as described above are considered to be a general structure mainly for the purpose of WebQuest design rather than a description of the pedagogical sequences of WebQuest activities (Prapinwong, 2008).

Perez (2005), considers the WebQuest strategy an important technological resource for promoting students' participation and interaction inside the classroom. Perez (2005) quoted Stoks (2002) to claim that WebQuests offer good internet-based language learning opportunities; they provide learners with exposure to authentic material, meaningful content and possibilities for real communication in the target language.

According to Lopez Morales (), Computer give teachers the opportunity to offer students, through the use of specialized applications and computer-based activities, an environment for interactive learning that can foster the acquisition of communicative skills and place them in situations similar to real-life. Lopez Morales (), states that one of the great strengths of the Web is the potential to engage students in creative information gap activities and real experiential learning in the form of meaningful, process-oriented projects in authentic settings.

Other potentials of WebQuests mention by Lopez Morales (), are the following:

- WebQuests introduce reading in a second language with the development of its skills through a complete innovative way.
- WebQuests increase the level of general knowledge in young learners,
   present them with distinct modes of thinking about and viewing world issues.
- WebQuests raise students' consciousness in terms of their own self as citizens and human beings.

In addition, WebQuests provide users the possibility to use its visual aids in order to facilitate them the understanding of new topics. In relation to this, Lin & Chen (2007) carried out an experimental study for comparing the effects of different types of computer-generated visuals (static versus animated) and advance organizers (descriptive versus question) in enhancing comprehension and retention of a content-based lesson for learning English as a Foreign Language (EFL). The participants of this study were 115 sophomores (20 males and 95 females) drawn from two sections of an intermediate EFL reading course at a private technical/vocational university in Taiwan. Participants in this study have not had the experience of studying or living in any English-speaking countries.

Lin & Chen, (2007) quoted Di Carlo, (1994) to suggest that visuals and specifically, videotexts such as TV commercials, movies, and dramas can enhance language acquisition by providing students various discourse contexts and reducing the anxiety typically experienced in second/foreign language learning.

#### WebQuests and motivation

Technology has shown to be crucial for enhancing students' attitudes towards learning a second language. As stated by Reiners, Renner, & Schreiber, (2008), technology improves motivation, engagement and interest when students use multimedia programs and software designed to develop skills and knowledge.

Using audio and video technologies brings content to life and stimulates learning. In this way, the usage of WebQuests as technological resource can be categorized as key element for increasing students' motivation towards the acquisition of a language. At the same time, Reiners, Renner, & Schreiber, (2008) cited Lumley, (1991) to state that students in traditional classrooms become bored if tasks are too easy and frustrated when they are too difficult. Using technology to diagnose students' strengths and then planning activities to build on those strengths builds a student's motivation to learn and succeed. In that sense, technology can be used as a trigger in the teaching-learning practices, where students have the possibility to enlarge their interest and notions about learning a second language.

One aspect that emphasizes the majority of teachers, who have implemented the WebQuest model in their lessons, is that this strategy is very motivating for their students (Spanfelner, 2000; Kelly, 2000, White Suarez, 2001 in Perez Torres, 2006).

Keller (1999), in Perez Torres (2006), identifies four strategies for achieving the creation of a motivating and instructive activity: attention, relevance, confidence and satisfaction. March (2003) in Perez Torres (2006) also considers that motivation can also be a filter to distinguish an authentic WebQuest from one that is not. March analyzes the motivational aspect of the WebQuests by reference to the strategies defined by Keller.

According to March (2003) the best way to get attention and relevance in a WebQuest is to choose an engaging topic, attractive for students. The task should be related to the topic and meaningful for the learner. it should be a task in which the student are involved in understanding or solving a real problem. The questions that a webQuest has constitute a motivating factor the students need and look for an answer. The confidence is achieved by a solid scaffold that stimulates and encourages students at critical moments of the process.

The division of students into roles increases the personal responsibility that will have a positive impact on their confidence. The satisfaction is gained through the use of actual web resources which give contact with the real world.

#### WebQuests and cooperative work

According to Lopez Morales (2003), since the WebQuests follow the constructivism philosophy, they tend to focus on cooperative learning and scaffolding, and provide an opportunity to work cooperatively allowing the students to exchange ideas, insights, and opinions on different topics.

Lopez Morales (2003), explains that is during these exchanges that students continue to build on prior knowledge and understanding based on the information presented through the WebQuest resources. She considers that when the students become familiar with this type of computer-based activities and with the web, they will have to learn to take responsibility for the proper use of the Internet and its offerings, the author also emphasize that as they begin to develop awareness of their learning process, they will begin to make use of cognitive (the mental action or process of acquiring knowledge and understanding through, experience, and the senses) and metacognitive (awareness and understanding of one's own thought processes) strategies to develop control over what they read.

In addition, WebQuests provide learners the opportunity to develop a task performing a particular role. Learners may work individually; in pairs or in groups depending on the requirements of the WebQuest, hence two types of work can emerge inside classrooms. These are cooperative and collaborative work. Stahl, (2010) quoted Dillenbourg, (1999) to assert that in cooperation partners split the work, solve sub-tasks individually and then assemble the partial results into the final output. In collaboration, partners do the work "together".

Likewise, Stahl (2010) referencing to Roschelle & Teasley's (1995) affirms that collaboration is a process by which individuals negotiate and share meanings relevant to the problem-solving task at hand. Collaboration is a coordinated, synchronous activity that is the result of a continued attempt to construct and maintain a shared conception of a problem. Based on this sight, it is evident that either type of works can be used to promote and achieve in learners significant outcomes in their learning process.

According to Warschauer (1997), in Lopez Morales, when students begin working with Web Quests, teachers will begin to comprehend the advantages of computer supported collaborative learning and the way in which it promotes reflection and cooperation. Additionally, the author states that with the use of computer- based activities, learners are face with a variety of multimedia and become motivated by, encouraging learners to work in tasks consistently and allowing them to learn from those with more computer skills than themselves.

### **WebQuests and Language Learning**

According to Perez Torres (2004) in Revés (2011), a WebQuest for teaching and learning a second language is "an inquiry orientated activity placed in a relevant thematic context, in which the development of the task implies the use of web resources and the development of higher order thinking processes in a collaborative environment". At the same time, the author states that WebQuests provides the students with the opportunity to learn and put in practice some linguistics skills, supported by a set of linguistic and procedural scaffoldings.

Revés (2011) refers to Perez Torres (2004) with the purpose of explaining that for a webQuest to be a successful language learning tool, it has to have four conditions for language learning which are: exposure, use, motivation and instruction. Revés (2011) states that due to the thinking process in a L2 is really complex and takes more time for learners comprehend ideas than in the L1, a

decrease in students' motivation can occur. In this sense, the author suggests that the kind of online reading material that will be provided to students, is carefully chosen by the teacher according to the students' language level, cultural interests and the four conditions for language, in order to make web pages in L2 a motivating and engaging element.

In addition, Sox (2009) in Tun-Whei (2007), suggests that WebQuest benefits language learning in several respects. The author states that when learners are Engaging in a WebQuest activity, they have the possibility of being exposed to the target language by surfing on the internet. Also, making sense out of the web documents, while skimming and scanning web-sites is a useful exercise for learners to increase their language comprehension. In addition, the problem-solving approach of WebQuests may facilitate language learning if the goal is related to the target culture in a way that is perceived as real for the students.

Teacher assessment of Web-based language activities, including those using Internet resources, has shown that students perceive more advantages than disadvantages when using multimedia to learn a second language (Mak & Mak, 1995). Tun-Whei's (2007) conducted a study in a college of foreign languages in southern Taiwan which aimed at exploring the effects of a WebQuest Writing Instruction (WQWI) program on Taiwanese EFL learners' writing performance, writing apprehension, and perception of web-resource integrated language learning. Participants of the study were students from two junior college classes. One class received traditional classroom writing instruction and the other class, the WQWI program. The results from this study indicated that students in the WQWI class improved their writing performance significantly more than those in the traditional classroom writing class.

The WebQuest Writing Instruction class had a favorable perception of the program, recognizing more advantages than disadvantages of language learning through web resources. Advantages reports the provision of rich, authentic, and

current information, exposure to colorful visual elements, enhanced flexibility of individual learning pace, reinforced learning of the subject matter, heightened motivation, and increased interest. Disadvantages included frustration from slow or failed access, confusion in selecting and synthesizing relevant information for the writing tasks, and difficulty in working with group members for collaborative writing. In addition, the findings from this study suggested that integrating web resources into EFL writing instruction, using the WebQuest model, was effective for enhancing students' writing performance and provided a positive learning experience.

In addition, Boloña Lopez (2010) conducted an action research study regarding the learners' perceptions of using Nicenet ICA, an online assistant for English learning in an EFL classroom in Ecuador. The author reports that participants of this study perceived the effects of internet activities through Nicenet as highly beneficial and therefore showed a high acceptance for educational technology application in the process of learning English for international communication.

#### 5. METHODOLOGY

#### 6.1 Context

The current study was carried out in a 5<sup>th</sup> grade ESL classroom from a public K-9 basic school. The school which will be called Antonio Jose de Sucre is located in an urban area called Villavicencio on the northeastern of the city of Pereira (Risaralda). This educative institution offers a basic educational level from Kindergarten to 9<sup>th</sup> grade, serving a population of 995 students, mostly from a social status 1 and 2. Most of these students are children of the working class (single mothers and heads of households, street vendors) and a small part of state employees. It also shows a high degree of social breakdown because many of these children and youth live with people different from their parents since they have immigrated to other countries.

The personnel of the educative institution also includes a vice-chancellor, an academic coordinator and a disciplinarian, a secretary, a treasurer, a librarian two cleaners, three guards and thirty three teachers. Antonio Jose de Sucre has important pedagogical spaces for learning optimization, including a video room and a computer lab approximately with 35 computers recently donated by the National Program "Computadores para Educar", whose purpose is involving computers in the educational work.

For the development of the current study, the group 5 B was chosen in response to the suggestion of the academic coordinator to which he referred as an active, disciplined and affordable group.

Initially we carried out a preliminary observation to the group 5 B and then we decided to interview the primary teacher and 6 students of the same grade chosen in response to the suggestion of the teacher to whom she referred as students with different proficiency in the English and informatics areas. These research

methods were implemented in order to know both the methodological guidance of English by the educator, as the perceptions of students about these.

At the moment of analyzing the research methods, it could be determined that the methodology used for the English learning guidance was based on the translation of short and simple texts, repetition of words and phrases, relation of images with words to which was implemented the individual and collective work. For the development of these activities were used word searches and worksheets with images, script and pronunciation. Only sometimes the primary teacher used the tape recorder and the TV but she has never employed the computers for this purpose. In addition, the primary teacher argued that using computers to teach English would be a positive resource in order to facilitate students' acquisition and development of the target language. However, she claimed that the English syllabus of that school was already done, and that it did not include computers as a methodology for teaching English.

On the other hand, the six interviewed students expressed that they would like to learn English not only through writing and repetition but also through games such as puzzles, bingo, lotteries, modern songs, role plays and interactive games in order to be more proficient in English and thus develop better attitudes towards the English language.

The students' perceptions and attitudes about the way in which they are learning English, made us think in the creation of a WebQuest implemented through the internet and computers. In this sense, the implementation of this technological resource could provide new and significant learning environments, allowing the students a permanent interaction with the second language.

According to the academic coordinator of the educative institution, Antonio Jose de Sucre owned the appropriated amount of computers to start implementing this new teaching methodology. Additionally the academic coordinator and the 5<sup>th</sup>

primary teacher accepted the incorporation of the WebQuest in the 5<sup>th</sup> grade English syllabus, in order to perform the present study and thus obtain outcomes that can demonstrate to what extent the use of this strategy impacted the teaching-learning process of English as a second language in the 5<sup>th</sup> grade of the institution Antonio Jose de Sucre.

#### 5.2 Participants

The participants of this study were six 5<sup>th</sup> graders that were grouped into three couples and who we called Valeria and Camila (P1-P2), Camilo and Santiago (P3-P4), and Carlos and Pedro (P5-P6). Participants are Spanish speakers and they are learning English as a second language. According to their teacher, she considers that students are beginners in English because they are able to understand short stories told in a simple language, some words, sentences and expressions related to the family, friends, school and home. The teacher also expresses that student are able to say and write some words, short and isolated sentences in order to express their feelings and topics about the school and the family. However, the teacher thinks there are some variations in proficiency. At the same time, the three couples express that they have a basic knowledge about the mastery of computers. *Valeria is 9 and Camila is 9 - Camilo is 9 and Santiago is 10 - Carlos is 10 and Pedro is 10* years old.

#### 5.3 Instructional design

According to Garcia Guillén (2008), the use of computers in the teaching and learning of foreign languages, constitutes a work tool needed to develop cognitive and innovative processes. Also, as said by Schacter (1999) in Santulli (2006) Computer-based instruction individualizes the education process to accommodate the needs, interests, current knowledge, and learning styles of the student. In addition, Santulli (2006) states that technology in the classroom is an effective

device which aids in student's learning and helps to tailor their education by giving differentiated options using web-based projects so that students of all abilities can succeed.

As it is known, because of the fast spread and development of new technologies in education, especially the use of internet, many schools took steps to have computers with Internet connection, and thus use the computers as a tool to gather information about different kinds of topics. However, when children are looking for relevant information, Kuiper, Volman and Terwel (2005) claim that they feel overwhelmed by the large amount of information, have problems for selecting the best sources and end up more focused on the search for information than in actually using it for the intended purposes.

To address this problem, Bernie Dodge and Tom March, at San Diego State University, "developed a mode of instruction, the "WEBQUEST", which guides the students to focus and interact more directly with the information." (Early, 2005). As it will be remembered, most of the resources the students interact with during a WebQuest must come from the internet and have been previously selected and analyzed by the teacher to fit the student's needs and the task requirements.

## 5.3.1 Description of the WebQuest "exploring the Matecaña zoo"

The WebQuest (http:// www.wix.com/menilinda/the-matecana-zoo) was designed by the authors of the present study to be used by the 5th graders of the school Antonio Jose de Sucre.

After an initial diagnosis of students' learning needs and a consultation with the group regular teacher, the following standards<sup>1</sup> were considered for guiding the planning of the instructional design that would be applied:

- Identifying people from their physical description (listening comprehension)
- Associating a picture with its physical description (reading comprehension)
- Recognizing in a short narrative text aspects such as what, when and where (reading comprehension)
- Write short descriptions based on a sequence of illustrations (writing)
- Describing me or a known person, using short and simple sentences taking into account its age and physical characteristics (monologue)
- •Asking and answering about physical characteristics of familiar objects (conversation)

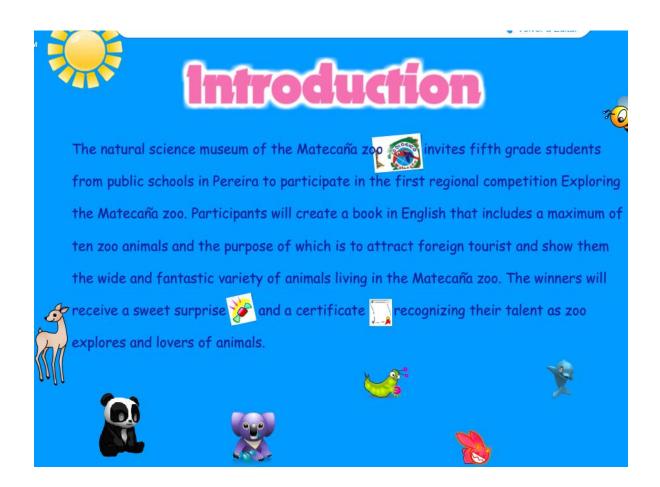
The goal of the WebQuest was to provide 5th graders with a great deal of language experiences and a variety of opportunities that allow them an active practice, development, improvement and enrichment of their communicative competence in English supported by the use of internet resources and the teacher's facilitation.

With this goal in mind, the present instructional design involved defining a task appropriate for students' communicative level, needs and interests; design a clear description of the process that students should follow to perform the task, define interesting and motivating enabling activities as well as a rubric for students to know how they were going to be evaluated.

\_

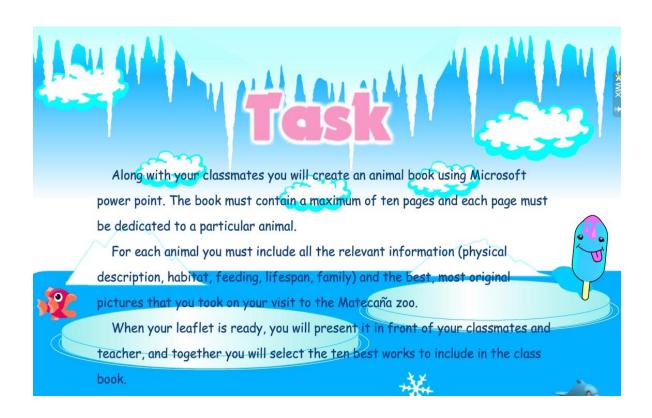
<sup>&</sup>lt;sup>1</sup> Ministerio de Educación Nacional. (2006). Estándares Básicos de Competencias en Lenguas Extranjeras: inglés. Formar en lenguas extranjeras: Inglés !el reto!.

To start with, the WebQuest presented an introduction section. In it, students were motivated to participate in the activity by a narrative framework in which the specific task that they had to complete was integrated in a fictional context (In this case, it was a fictional competition).



http://www.wix.com/menilinda/the-matecana-zoo#!\_\_introduction

The task involved students in the creation of a leaflet containing relevant information of a particular zoo animal chosen by them (physical description, habitat, feeding, lifespan, family). Students were required to write a short text and illustrate it with pictures taken by them in a visit to the zoo programmed as part of the learning activities. In addition, participants had to present orally their leaflet to their classmates and teachers. This information with the particular characteristics about the final product (animal leaflet) to be developed was included in a section of the WebQuest that can be seen in the following image:



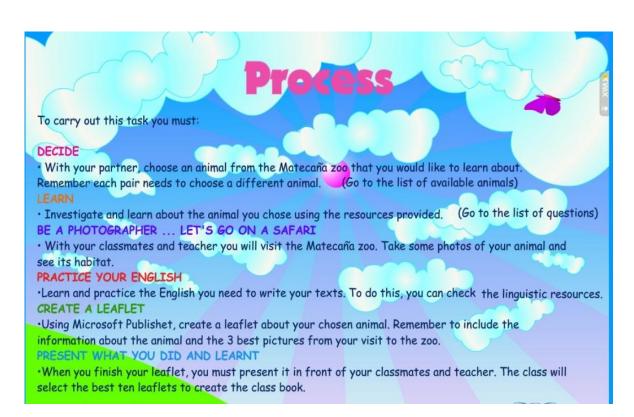
http://www.wix.com/menilinda/the-matecana-zoo#!\_\_task

With the purpose of enabling the students to complete this task, 9 sessions were designed. The linguistic contents were first presented and practiced in the classroom, and then complemented in the computer lab through the use of the resources included in the WebQuest.

The selection of resources presented to students was carefully chosen by researchers with the aim of offering them not only safe and useful websites adapted to their linguistic knowledge but also entertaining and real materials that might enhance their motivation and show them real contexts in which what they are learning is proven useful. These resources included texts appropriate for their age and level of communicative competence as well as videos and songs to help them improve their listening skills and pronunciation.

The WebQuest included a section describing the process that students should follow in order to prepare and successfully complete the final task. It required them to work through several steps with their partners.

In the following image from the original WebQuest presented to the students, the process can be seen:



http://www.wix.com/menilinda/the-matecana-zoo#!\_\_process

First, and as one of the characteristics of WebQuestsis to promote cooperative work, students had to choose a partner to work with.

They had to study the information offered in the WebQuest resources about the Matecaña Zoo animals in order to help them become zoo explorers.

Next, a trip to the zoo was taken with the aim of motivating and engaging students in the learning process and allowing them to see the usefulness of the language and contents that they were learning. During this trip, by means of an observation race, students had the task of taking pictures of the animals and getting extra information that they would use for creating their leaflet.

In order to strengthen their linguistic skills and practice the language they would require for the task, students had in the WebQuest a link to a website created by the researchers including linguistic resources.



http://www.wix.com/menilinda/the-matecana-zoo#!\_\_linguistic-resources

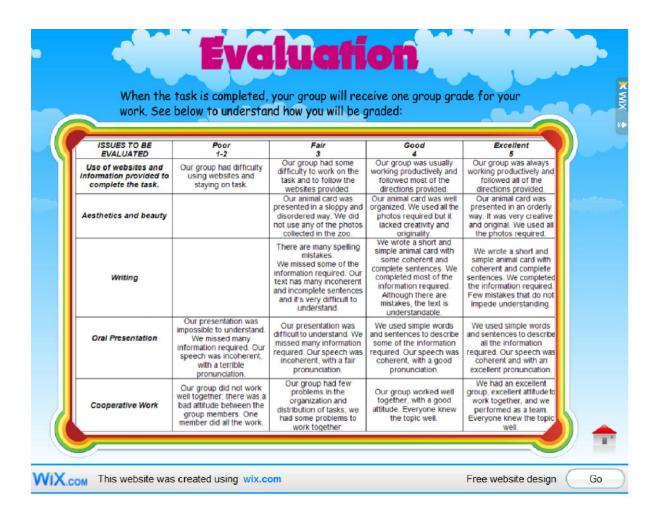


http://www.wix.com/menilinda/the-matecana-zoo#!\_\_resources-animals

Finally, students would have to use all their resources in the target language in order to elaborate a product that would be presented to their classmates and the teacher.

As it can be noticed, the offer of resources aimed at helping students to exercise their skills in an integrated manner. The potential combination of receptive skills when scanning and skimming online information and listening to varied aural input such as videos, songs and dialogues helped participants to use productive skills in positive way. The integration of skills was not done arbitrarily, since students communicated information according to what they had read, and wrote descriptions on the basis of what they had read and had reported. The integration of skills was therefore always present in the WebQuest project.

The WebQuest included a section in which students were informed of the parameters and policies for assessing the final product that they would elaborate, both in terms of content and language. This was done with the purpose of allowing them to know the teacher's expectations and to focus on those issues that would be considered for evaluation. The original rubric for evaluation can be observed in the following image.



http://www.wix.com/menilinda/the-matecana-zoo#!\_\_evaluation

Finally, the conclusion served as a closure to the activities.



http://www.wix.com/menilinda/the-matecana-zoo#!\_\_conclusion

The process of elaborating and implementing the instructional design took place along a period of 5 weeks and involved two different stages:

During the first stage (exploration and design) the researchers carried out the initial diagnostic test in order to establish the 5th graders' initial level of communicative competence in English and thus carried out an appropriate design of activities and selection of resources appropriate to students' specific needs and interests.

In the second phase (orientation on the WebQuest project) the WebQuest was presented and step by step, explanation was given to students. In the next

sessions, the necessary linguistic input was introduced first by the teacher in the classroom and then practiced through extra resources included in the WebQuest.

### 5.4 Methods for data collection

### 5.4.1 Field notes:

Field notes refer to various annotations recorded by researchers during or after their observation of a specific phenomenon they are studying. Field notes may include written notes, photographs, drawings, tape-recordings, video film, etc. (Robert M. Emerson, Rachel I. Fretz, Linda L. Shaw, 1995). The researchers took field notes in order to document the observations as well as their reflections and opinions about the instructional process. A video recording of the class and lab activities was made to help complete the field notes.

### 5.4.2 Observations:

Observation is a type of research strategy that aim at gaining a close and intimate familiarity with a given group of individuals and their practices through an intensive involvement with people in their natural environment, usually over an extended period of time. (Douglas, J.D., 1976)

The researchers conducted a set of observations during six weeks. They spent two hours per week observing the activities in the English classroom and the six 5<sup>th</sup> graders engagement in all the lessons. Part of the activities took place in the students' regular classroom and another part in the computers lab. The lab observations were focused on determining the participants' behaviors, attitudes and motivations towards the use of the WebQuest strategy for learning English. The observations were documented through field notes.

### 5.4.3 Interviews:

A semi-structured interview is a method of research used in the social sciences. While a structured interview has a formalized, limited set of questions, a semi-structured interview is flexible, allowing new questions to be brought up during the interview as a result of what the interviewee says. The interviewer in a semi-structured interview generally has a framework of themes to be explored. (Lindlof and Taylor, 2002).

Three semi-structured, open – ended interviews (see appendix 1) were conducted with the six participants in order to explore their beliefs about second language teaching and learning supported by the use of computers. All of these interviews were video-taped and later transcribed verbatim. The interviews were carried out at the beginning, in the middle and at the end of the study.

The interviews that were applied at the beginning of the study, aimed at examining the initial participants' perspectives about the implementation of a WebQuest through computers in the English classes. The interviews that were used at the middle of the study looked for the partial outcomes that were provided by the participants, in order to know to what degree the initial participants' perspectives had been changing. In addition to that, the participants revealed how the use of computer influences their own learning styles. The interviews that were employed at the end of the present study, aimed at gathering the participants' final perceptions.

### 5.4.4 Initial test:

The aim of the initial test was to establish the 5<sup>th</sup> graders' initial level of communicative competence in English. This test covered items that reflect overall understanding of the language such as active vocabulary items, grammar items, comprehension items, which are supposed to be covered in the 5<sup>th</sup> grade curriculum with different degrees of depth. The test was designed to observe the possible changes in that competence after participating in the WebQuest project.

The WebQuest project "exploring the Matecaña Zoo" aimed at helping students to improve their descriptive and receptive abilities as some of the standards for the writing, listening and reading skills. According to "The basic standards of competition in foreign languages: English" for 4-5<sup>th</sup> grade students, consist on being able to write short descriptions based on a sequence of illustrations, identify people/animals/things from its physical description, associate a picture with its physical description and recognize in a short narrative text aspects such as what, when and where. (Translated from the 4-5<sup>th</sup> grade of specific standards of foreign languages: English)

As the final task of the WebQuest required students to write the physical description, habitat, diet, lifespan, and family of a wild animal, the test presented to the students a similar task, in this case, the students had to use their previous knowledge about shapes, colors and sizes to describe a familiar object (house). The test was created by the researchers and its total score was 52 points distributed among writing ability (42points), Reading comprehension (10 points), Listening comprehension (10 points).

Through this test we were able to assess the students' abilities for describing, their use of basic grammar structures, use of vocabulary, verb to be, spelling and punctuation. Additionally, we were able to observe their strengths and difficulties in reading and listening skills which helped us to know the students language needs and difficulties in order to implement a more comprehensible and appropriate WebQuest project for 5<sup>th</sup> graders.

**5.4.5 Final test:** The aim of the final test was to establish the students' level of communicative competence after participating in the WebQuest project. The final test was almost identical to the initial test as it had the same type of items, number and structure. Some differences in the final test were its higher level of complexity and topic. Comparing the initial with the final test we were able to analyze the

positive or negative impact of the WebQuest project on the development of communicative competences in English of 5<sup>th</sup> graders.

For the evaluation of this test, the following standards were considered:

- Write short descriptions based on a sequence of illustrations.
- Identify people/animals/things from its physical description.
- Associate a picture with its physical description.
- Recognize in a short narrative text aspects such as what, when and where.

The final test as the initial one was divided into three parts with the purpose of evaluate each skill separately. The first part of the final test consisted on describing a big and colorful illustration of a zoo. Here, Students had to use most of the topics covered in the WebQuest project in order to complete the test. For example physical characteristics of animals, what things they can-can't do, what place they are located, their daily routines, among others. The second part of the test was about listening and reading comprehension, in the first point students had to listen five short paragraphs describing five animals, so students in their papers had to circle the correct animals in the correct order. In the third point students had to match the animal with its corresponding description.

Through this test we were able to compare the students' actual language abilities for describing, their use of basic grammar structures, use of vocabulary, verb to be, spelling and punctuation in relation to the initial language level. Additionally, we were able to observe students responses in reading and listening skills after implementing the WebQuest project.

### 5.5 Role of the researchers:

Two researchers were involved in the study. Both of them performed different roles throughout the study since they were designers of the strategy, instructors, observers, and interviewers. The researchers designed a webquest to work with the participants, planned and taught the English language sessions, evaluated the students' development of communicative skills and conducted the observations and interviews. While one researcher was instructing students, the other one took field notes and video-recorded the sessions. While one researcher was interviewing students, the other one took field notes and video-recorded the sessions. The researchers' roles were changed in each English session. After each session, both researchers analyzed and reflected on the information gathered and took notes on their journals about what they perceived in the sessions.

### 6. DATA ANALYSIS

This research involved the combination of two different types of data analysis process for different types of data.

## Qualitative analysis

After the data collection was completed, the researchers used the Grounded theory (GT) in order to start analyzing the data. Grounded presents the investigator as the main instrument for data collection and analysis. This method attempts to derive meaning from the data, having as a result theory emerging from/ or grounded in the data collected (Strauss and Corbin, 1994).

The data from the students' interviews, observations and field notes were carefully read and re-read and then coded. . As a result of the coding process, common patterns emerged. From these patterns, categories were define and were the basis for the writing of our findings.

### Quantitative analysis

In order to determine the development of the participants' communicative skills, it was necessary to apply an initial and a final language test to have evidence of the potential change of the students.

The pieces of writing and the answers that students produced during the initial and final tests were analyzed by using an analytical rubric that included elements such as active vocabulary (forms, colors, shapes), spelling, use of verb to be, grammar structure, and use of punctuation marks were took into account.

This assessment gave a numeric result for each participant that allowed calculate the average result of the group in both the initial and final test and compare them.

It also allowed give evidence of the changes in each participant's linguistic results after their use of the webquest.

These numeric results were compared and presented in graphic charts created with Microsoft Excel and allowed us to answer our first research question.

### 7. FINDINGS AND DISSCUSSION

# 7.1 Positive impact of the WebQuest strategy on the development of writing and oral skills in English

After analyzing the tests and the final task used to determine the participants' level of communicative competence before and after participating in the WebQuest project, we found that:

Integrating web resources into the EFL language instruction using the WebQuest model, was a useful strategy for enhancing 5<sup>th</sup> graders' communicative abilities, particularly writing that was the skill evaluated through the tests. Results showed significant differences between the initial and final test scores (see Table 1). As shown in table 1, participants' average score in the final test was higher than in the initial test. It is significant to notice that all the participants obtained in the final test the maximum result - (52 points) distributed among written production (32 points), reading comprehension (10 points) and listening comprehension (10 points).

Average scores

50,0

40,0

30,0

10,0

39,7

52

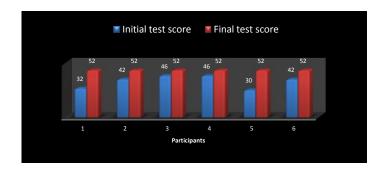
0,0

initial test

final test

TABLE 1. AVERAGE SCORES IN INITIAL AND FINAL TESTS

TABLE 2. PARTICIPANTS' INDIVIDUAL SCORES



Before implementing the Matecaña Zoo WebQuest strategy, participants completed a writing task which aimed at establish the participants' initial ability to write short descriptions based on a sequence of illustrations. This writing test covered criteria such as active vocabulary, spelling, use of verb to be, syntax and use of punctuation marks, aspects which are supposed to be covered in the 5<sup>th</sup> grade curriculum with different degrees of depth.

Basically, participants were asked to use their previous knowledge about shapes, colors, and sizes in order to describe a familiar object (a house). Results of this writing task clearly showed that participants' initial level of competence in writing skill was really low in relation to the criteria evaluated. P5 and P6, described as the regular 5<sup>th</sup> grade teacher as low achievers in English, evidently demonstrated in the following graphics (1 and 2) being the participants with greater weaknesses on English writing proficiency.

### **GRAPHIC 1. INITIAL WRITTEN DESCRIPTION EXERCISE**

**P5** 

\*\*HOUSE

The house is the colors yellow, red, blou, black, bren and dark.

The house see windos the colors dark.

The house see port the colors yellow and small.

### **GRAPHIC 2. INITIAL WRITTEN DESCRIPTION EXERCISE**

**P6** 

1 The techo blue de figura triangular

2 Tha Windoogs is broom de figura redonda

3 Tha dooc is Yellow de figura triangle

4 Tha Couse is red de figura cuadrada

5 Tha Chimenea

6 The pasto green

7 The cielo blak

Henry Stiven Lopez

It is important to highlight that participation in the WebQuest project improved significantly participants' initial capacity to write short descriptions. However, it is even more interesting to notice that those participants who had obtained the lowest results in the initial writing test were able to reach the level of the participants with the higher results.

Participants' high writing performance scores after they were exposed to the WebQuest experience made us consider that the writing input and the way it was provided were the primary reasons for participants having reached these results. Students were exposed to a variety of web resources that allowed them to practice a range of English grammar structures through different linguistic resources related to the topic as well as to relevant and authentic information about wild animals. Both the linguistic and general knowledge about the topic were necessary to complete the final task.

According to Tun-Whei (2007), research on second language reading and writing connections suggests that learners may improve their writing ability if they are exposed to reading texts in a process of communication (Abu Rass, 2001; Elley, 1991; Ghawi, 1996; Leki, 1992). In this way, it is possible that participants' exposure to the target language through surfing on the web and their necessity of making sense of texts and using reading strategies like skimming and scanning, may have helped them to increase their English language comprehension, facilitating writing development and also vocabulary acquisition.

At the same time, the kind of language input and the learning support participants were exposed to offer us other reasons to explain why students obtained a superior writing performance in the final test. By means of adequate scaffolding, participants were guided to explore web resources previously selected, which were rich in quantity and authentic in quality for the proposed learning content. The Web materials in the Matecaña zoo WebQuest offered the kind of language input that Doughty and Long (2002) described as possessing "linguistic complexity, quality, quantity, variety, genuineness, and relevance" when they commented on the capability of computer technology for providing input to language learners (Tun-Whei, 2007).

In addition, with the purpose of providing learners with an appropriate learning support that helped them to carry out a meaningful task, the resources included in the WebQuest not only were presented as resources of information, but also as tools with which students could interact, practice basic target grammatical structures, acquire lexical knowledge and perform a great variety of linguistic exercises. Students were encouraged not only to obtain information in a passive way but also to actively engage in developing cognitive strategies such as understand and infer information from the texts, analyze, and classify the information provided, and transform it in new knowledge to produce authentic output. Also, other supportive elements provided in the Matecaña zoo WebQuest like links to online dictionaries, videos, songs and visual aids, played a vital role in facilitating students' vocabulary learning and language comprehension.

According to the results obtained in the final test, there was also an important learning gain in the writing skill since most participants showed significant progress in terms of linguistic knowledge such as employment of vocabulary, spelling, use of verb to be, syntax and punctuation marks; aspects that were used to measure the knowledge of each participant before and after using the WebQuest.

It is important to highlight that those participants who demonstrated the weakest writing skills in the initial test (P5 and P6) were able to obtain the maximum score in the final test. As shown in graphics 3 and 4 significant differences were found in their writing ability.

### **GRAPHIC 3. FINAL WRITTEN DESCRIPTION EXERCISE**

**P5** 

# THE ZOO

·The Zoo is big.

\*In the Zoo lives the tiger, the Flamingo, the hippo, the horse, the alligator, the lion, the elephant, the Zobra, the govilla, the snake, the rhyno, the peackock and the condor.

The tiger is yellow and big. The tiger is in the cage. The tiger can run but card Fly. The Flamingo is a bird, is large and pink. The Flaming is in the wter and is next to the rhyno, the rhyno is grey, big and is in the legs are shart and the rhyno can't Jamp. The rhyno eats turtles and Fishes. The alligator is reptile is green and large.

The alligator is on the stone. The alligator is behand the elephant, next to the govilla and lion. The elephant is strong and lion is Furry and brave.

Carlos Andres.

### **GRAPHIC 4. FINAL WRITTEN DESCRIPTION EXERCISE**

**P6** 

# THEZOO The animals in the zoo are; Hippo, tiger, alligator lion, elephant, zebra monkey, Flamingo and horse · The hippo is grep, is a mam mal wit short legs. the hippo eats grassat in the morning · The flamingo is behind the hipporthe flamingo is a pink bird and is in the water. · the allegator is green and is dangeros. the alligator can sum but can't fly. · the elephant is big and gres, the ears arebig and trunck is long. the elephot 15 ander the tree. the elephant eats Fruits. the zebra is blak and white wit straipes. the zebra can jump and run the lion is yellow and brave, the Lion is in the cage. the lion is next to the elephant.

Comparing the written description exercise produced by P5 and P6 in the initial and final tests, significant differences were found in their writing ability. Aspects like active vocabulary, use of verb to be, spelling, syntax and use of punctuation marks were greatly improved by P5 and P6 in the description of the final test. It seemed that, implementing the WebQuest strategy into English as a foreign language

instruction was effective for enhancing 5<sup>th</sup> graders' writing performance and provided a positive learning experience.

In relation to the abilities of reading and listening comprehension most participants maintained the same score on both tests. From this data we can determine that the level of complexity of both tests was too basic for most students' language capacities and then it was not possible for us to observe a progress between some participants' initial and final test scores. However, the fact that participants obtained correct answers in all exercises, does not necessarily mean that participants did not have any progress in these communication skills. It only shows that it was not possible to measure it.

Another sample of data that supports the idea that "the WebQuest model is effective to develop foreign language skills in an enhanced environment" (Vernier, Barbuzza, Giusti & Moral) are the participants' results from the final task proposed in the WebQuest.

As it will be remembered, the WebQuest involved a final task for students in which they were requested to create a leaflet containing all the relevant information of a particular zoo animal (physical description, habitat, feeding, lifespan, family). In addition, participants were asked to present orally each leaflet in front of their classmates and teachers. This task aimed at establishing the participants' level of communicative competence after participating in the WebQuest project. For this purpose a rubric containing criteria related to usage of websites, aesthetics and beauty, cooperative work, writing and oral skills was designed and presented to students. All these criteria were mainly classified in four categories: excellent, good, fair and poor.

Results from the final task of the WebQuest showed that participants achieved high writing and oral performance in the presentation of the leaflet as they were able to write short descriptions based on a sequence of illustrations (writing), and describe a known animal using short and simple sentences taking into account its physical characteristics (monologue). (Translated from the 4-5<sup>th</sup> grade of specific standards of foreign languages: English). Besides, most participants classified in all items of the rubric either as excellent or good achievers.

Evidence of participants' successful performance in the presentation of the final task can be seen in the following fragment from the Researchers' journal:

### Session 5: Evaluation of the final task

"At the same time, it is important to mention that Pedro is pronouncing very well as is also his partner, Carlos. He shows a previous preparation of his oral presentation. He is talking without many hesitations and his face looks serene. Also, he is moving his hands subtlety, what indicates good management of his body language. As Carlos, P6 has good voice projection and he is reading his leaflet too. As it was said before, P5 and P6 are taking turns to talk. The description is carried out using simple and coherent sentences".

As it can be observed from the previous description, P6 was able to perform in a successful way the oral presentation of the final task. This fact is really important for us since P5 and P6 had showed to be the participants with the lowest English proficiency level in the initial diagnostic test; However after they had been exposed to the WebQuest model their profile changed and they proved to be high achievers in writing and oral skills.

According to Laborda (2009), oral production and development is fostered through reading and oral interaction - both comprehensible and incomprehensible input - and also by repetition, contextualized settings and experiential work. In this sense, we can say that when participants of our study were exposed to cooperative work task assignments, exchange of information, passive and active reading, linguistic structure and vocabulary learning; new vocabulary as well as oral and writing input was effectively received which helped students in understanding all the information and instructions provided, enhancing students motivation as they were able to carry out the oral presentation in front of the teacher and classmates.

### 7.2 The WebQuest as an interesting and motivating strategy

One of the finding related to our second research question deals with the reactions demonstrated by students while they were involved in the WebQuest tasks and activities.

All participants showed a positive attitude towards learning English using a WebQuest strategy. This fact could be noticed in their expressions of happiness, their interested faces and their disposition to work.

Students' reactions were evident in the interest and excitement showed in their different comments and facial expressions. At the same time, students' participation was remarkable since they worked actively in the lessons and they investigated and practiced on their own in order to accomplish the tasks. An evidence of the students' reactions was apparent in the following fragments:

# Field diary. Session1: Explanation of the WebQuest

"All participants whispered continuously with their closest classmates about the different characteristics (colors, shapes, movements, speed and advantages of the webpage) they were observing in the WebQuest. Their faces expressed gladness and readiness to use the computers. They did not seem lost or tired with the teacher's explanation"

As it can be observed from the previous description, students showed a positive attitude towards the use of the WebQuest. This fact was evidenced by their interested comments about the visual elements included on it and their excited faces. The participants were focused on the explanation and they were disposed to work on the tasks.

According to Lin & Chen, (2007), "Visuals, such as pictures/static images or video, have gained popularity in foreign/second language teaching for purposes of teaching reading comprehension". In that sense, it can be said that visual aids provided in the WebQuest, were an important technological element for boosting students' interest and motivation in learning.

These elements were also key for motivating students to read and help them to understand the content of the text and get the appropriated information for accomplishing the final task. Additionally, it is relevant to mention that in spite of having participants with low English level, all of them had positive attitudes towards the use of the WebQuest .

Another sample of data that supports this finding comes from the researchers' field diary, where we can "listen" to the participants' voices:

# Field diary. Session1: Transcription of the Explanation of the WebQuest

**Setting:** Participants were looking the WebQuest for the first time

"P1: ahhhhh... mira los animalitos como se mueven (the participant points out the screen of the computer with a sweet face)

**P2:** siiiiii, y también los árboles (the participant talks with an exciting voice)

**P3:** mira los colores, tan bonito (the participant points out the screen of the computer with an astonished face)

**P4:** y mira el elefante, está saludando (the participant talks with an enjoyable face and smile)

**T:** ok children this is the WebQuest

**P4:** profe..., tan bonita ¿usted la hizo? (the participant screams)

**T:** yes, Santiago with my partner Maithya (the teacher nods and points to her partner who is video recording the situation)"

As it can be observed, the design of the WebQuest was appropriated since it helped students to be focused on it. The different colors, videos, songs, icons and moving images were the icebreaker that helped to increase the students' motivation along this teaching/learning process. They contributed to create a funny and comfortable learning environment for students.

Zhen, (2011) referencing Baker, 2001; Mayer & Anderson, 1991; Mousavi, Low, & Sweller, 1995; Moreno & Mayer, 1999 states that "their studies have shown that learning technologies, such as multimedia, can enhance cognitive learning and make students better learners" and affirms that "these studies revealed that learners with different learning modalities actually learn better with multimedia due to the multiple learning cues (i.e., audio and visual)".

It is remarkable to point out that multimedia was used as the trigger element for promoting and active the students' curiosity and willingness for developing the tasks in the WebQuest. Multimedia offered participants the alternative to use untraditional resources that helped them to prompt their interest towards learning. In addition, it was evident that multimedia was an essential technological resource that provided students a relaxed environment for learning a second language. This way, the outcomes of our research corroborate the idea that the use of multimedia in classrooms helped students to be involved and animated for working with it.

In general, all participants showed a high level of interest and motivation when working with the WebQuest, both in class and at home. The following excerpts from our data show evidence of it:

# Students' interviews at the middle of the study

"I: ¿cómo ha sido tu desempeño utilizando la WebQuest?

**P5:** (...) en las clases me meto siempre rápido a la WebQuest , hago todos los ejercicios, veo los videos y trato de aprenderme las canciones por la noche en mi casa pa' decírselas a la profes

**P6:** (...) cuando la profe revisa los ejercicios de la WebQuest están buenos, y además practico en mi casa para aprender más y ser capaz de hacer el plegable"

As it can be observed, the participants' answers about their learning behavior revealed that they were so engaged using the resources of the WebQuest that they felt motivated to continue learning on their own and spent time at home

memorizing songs and vocabulary and preparing for completing the task successfully.

It is particularly significant that these two participants were chosen due to their low level of engagement and their poor performance in the English class tasks, so their answers can be considered as a clear sign of their positive reactions to the implementation of the WebQuest.

According to Hopson, Damos & Busath, (2005), "When students are involved with a WebQuest, they are actively involved in the learning and the teacher takes the role of the facilitator. Students are more likely to become motivated to learn, and the results are better than if the students worked individually, the teacher simply presented the information to be learned or had the students read the information out of a book".

In that way, it is important to emphasize that the implementation of the WebQuest strategy was interesting since it enhanced participants to use the autonomous learning for developing different activities and the final task. As regard to the English teacher' role, it could be said that she performed a role of facilitator because she was in charge of giving instructions, introducing and explaining the topics, while students were the only responsible for their own learning. Always, the teacher was guiding and solving students' doubts about the webpage. Both participants showed to have an especial commitment for learning and accomplishing effectively the tasks.

# 7.3 The webQuest as a trigger for students' collaborative work

Collaborative work was an aspect that had an important role throughout all the English sessions. It was included as a positive reaction of participants due to the encouraging outcomes of working in pairs at the computer lab.

The observations showed that participants had a close partnership and participated and interacted with each other all the time. They worked together as an organized team in the all English sessions.

In spite of collaborative work not having been planned in the research questions it was interesting and satisfactory to observe the many advantages offered to the students by working this way.

An evidence of collaborative work is described in the followings sample from our data:

# Field diary. Session 5: Daily routines

**Setting:** Participants (P5 and P6) were doing a multiple choice exercise in which they were given a picture and three sentences, and they must choose the sentence that describes a picture. It is important to mention that in spite of having divided the dialogue in order to highlight different aspects along the conversation, it involved permanent collaborative work of participants during the all conversation.

"P5: mire, Annie está en el comedor con la familia (he points out to the image on the screen)

**P6:** mmm... entonces debe ser la primera (the participant looks and sounds doubtful)

**P5:** ¿ésta? ... ¿she has lunch? (the participant is not convinced about the answer of P6)

P6: sí, esa (the participant talks doubtfully)"

The students make their choice and automatically they receive the feedback from the website. Unfortunately, they have made a mistake.

As it can be observed, a collaborative dialogue took place along the conversation. Participants were commenting about the exercise. It was evident that participants established an affable dialogue during the WebQuest activity. This conversation showed us that students did not just pick up any answer, there was a process of analysis of the situation and both participants offered their opinions in order to reach an agreement on the final answer that they were going to select.

Oliver & Omari, (1999) referencing Hoyles, Healy & Pozzi, (1992) establish that "Computers and learning technologies provide a natural stimulus for collaborative learning by increasing opportunities for social interactions and cooperation". Based on this sight, it could be said that collaborative work offered participants the opportunity to exchange their ideas inside a pleasant environment that allowed them to express their points of view without worrying about a right or wrong answer.

The involvement of students on the task was clearly seen in the reaction of participants when they found out that their choice was wrong:

Field diary. Session 5: Daily routines

"P5: ahhhhhh... perdimos (the participant talks dejectedly with a sad face)

**P6:** pero ¿porque? (the participant talks with a distressed face)"

As we can observe from this excerpt, the involvement of the students in the task was great as shown by their interest in the reason why they are wrong. Participants did not simply accept that they made a mistake, they wondered why. A metacognitive process took place when P6 asked P5 the reason why they had a mistake. P6 did not seem able to find the reason on his own and asked, we did not know if to his partner or to himself "yes, but ¿why?"

According to Nelson & Narens, (1990) quoted by Redford, (2011) "Meta-cognition--defined as thinking about thinking--involves a monitoring and control component".

Likewise, Redford, (2011) referencing Dunlosky & Nelson, (1992); Koriat & Bjork, (2005); Koriat & Ma'ayan, (2005); Serra & Dunlosky, (2005); Thiede, Anderson, & Therriault, (2003), affirms that "the monitoring component is responsible for assessing the mind's basic mental processes". In that sense, it was evident that P6's concern about their wrong answer became a meta-cognition process due to his necessity of finding out a logical answer for that error. He rethought and analyzed carefully the mental process he was following.

**"P5:** ahhhhh... claro. Es que... vea... la ventana está de noche, ella está comiendo, no almorzando (the participant points to the image on the screen)

**P6:** ahhhhh... claro pa' eso son los dibujos (the participant talks with a motivated voice)

**P5:** entonces escojamos she has dinner porque se acuerda que la profe dijo que dinner era la comida y vea que está de noche.

**P6:** si esa sí es... (the participant talks convinced)

P5/P6: siiiiiiiii... ganamos (the participants scream happily)"

As it can be observed, a metacognitive process was evident in P5. He could figure out the correct answer after rethinking and assessing his previous selection of the answer. He used the visual aids provided on the WebQuest for advising P6 about the correct answer they should have selected before.

On the other hand, it is important to highlight that an interesting issue took place along the dialogue. In it we can observe that Participant 5 acted as the more capable peer in the team and helped his partner to understand the reason why their answer was not correct. We can see how after P5 explanation, P6 suddenly realized of the use of the visual aids that accompany the task in the WebQuest.

This was an example of what Vygotsky described as the Zone of Proximal Development. According to Vygotsky, (1896-1934), "the zone of proximal development, is the difference between what a learner can do without help and what he or she can do with help". Based on this theory, P5 is placed as the more capable peer because he was able to discover the answer by himself, using an imagery cue (a window) that helped him both to know the answer and to explain P6 why they should have selected another answer.

Oliver & Omari, (1999) referencing Hoyles, Healy & Pozzi, (1994) report on "quite powerful interactions between students involved in computer based tasks where the collaboration was seen to lead to higher order thinking, hypothesis

formation and reflection". In that sense, the implementation of the WebQuest offered students' the opportunity to learn English using an innovative technological resource but also to place them in a social learning environment, where they could think and reflect about their answers freely. Moreover, it was evident that collaboration was the media for participants in order to enhance a growth in their knowledge.

### Journal. Session 2: Zoo animals and adjectives

Setting: All participants were doing an exercise about adjectives in the WebQuest

"It is interesting the fact that all participants are commenting and exchanging their opinions about the exercise. They seem to be happy and enthusiastic of being working in pairs in the WebQuest."

As we can see from the data presented, participants were involved constantly on interaction and exchanging of ideas that helped them to develop the different exercises, and the final task. From this point of view, it could be said that collaborative work in this learning process offered more benefits than cooperative work does. This fact made us think about the right decision of grouping students to carry out our research project. It was very important to enhance students to learn collaboratively rather than cooperatively, since collaborative work provided students the opportunity to learn reciprocally and to achieve a significant growth in their knowledge.

Oliver & Omari, (1999), quoted Light (1993) to report on "a review of studies which investigated the potential of computers to enhance group work and provide quite convincing evidence of the value of group work and collaboration, and its positive impact on productive learner dialogue, interchange of ideas and negotiation of solutions".

At the same time, Oliver & Omari, (1999), quoted Slavin (1977) to affirm that "the reward structures inherent in collaborative environments have been found to have positive effects on student motivation". The results of our research support the idea that participants' active participation and permanent interaction in the English classes, was influenced positively by the use of technology since it helped them to see learning as a helpful tool for improving their knowledge, but also for creating a comfortable environment that facilitated them to follow the process and complete the final task, and thus the communicative aim that had been proposed for the WebQuest.

# 7.4 Enthusiastic response of students towards learning English using a WebQuest

After analyzing the collected data in relation with our second research question "¿What are the student's perceptions and reactions about the implementation of a WebQuest for learning English?" we found that participants considered the WebQuest strategy as an effective tool for learning English and acquiring knowledge about a topic.

Students' opinions of the implementation, practice, and use of English learning activities through the Matecaña zoo WebQuest in conjunction with the teacher language instruction were explored in three different moments during the execution of the project.

It is remarkable that for being young learners, they demonstrated a significant awareness about the usefulness of internet and computers for acquiring

knowledge, enhancing learning in general, and finding new ways of studying even before the work with the WebQuest began.

Students' responses expressed that the possibility of working with this technology in their English lessons would give them the opportunity for experimenting new ways of learning English and be exposed to varied multimedia resources to practice and improve their communicative skills. At the same time, participants showed great consciousness about the importance of learning English and computer science, in order to respond competitively to the requirements demanded by the globalization process.

The following excerpts from the interview conducted with the participants at the beginning of the study provide evidence of the students' perceptions about using technology for learning English. The following data are the participants' answers to the question "I: ¿ Qué opinas acerca de aprender inglés por medio de internet y los computadores?"

**P4:** "yo pienso que es muy importante para aprender nuevas maneras de estudiar.

**P6:** "creo que es muy bueno porque internet da muchas opciones para desarrollar el conocimiento en forma más fácil y dinámica"

Participants 4 and 6's answers mention clearly their appreciation of the opportunities raised by technologies for acquiring learning in general. This is significant because all the participants are really young (between 9 and 11 years old) and they belong to a low socio-economic status.

P1: "Me parece que es una herramienta muy importante porque con la ayuda de las imágenes y los sonidos podemos reconocer el significado de las palabras y podemos aprender su pronunciación"

**P2:** Me parece que es muy bueno porque en internet hay muchas actividades que hacen que uno aprenda más fácil. Por ejemplo las canciones, los videos, juegos y eso nos sirve para practicar y mejorar la escucha, la escritura, y todo eso.

As it can be seen in P1 and P2's words, they are also aware of the usefulness of Internet to enhance learning. P2 mentions that he learns more easily with internet activities ("hacen que uno aprenda más fácil"), and it is interesting to notice that both students consider it particularly important for developing oral skills as one of them mention listening and the other pronunciation.

Finally, P3's answer show his interest for a strategy that combines knowledge from two usually isolated fields, language learning and computers science:

**P3:** "creo que es muy importante porque hoy en día todo el mundo necesita saber de inglés y de sistemas entonces es bueno integrar las dos."

Students' optimistic thoughts towards using computers and internet for learning English coincide with the results from an action research study about learners' perceptions of using NICENET ICA, an online assistant for English learning in an EFL classroom in Ecuador. According to Boloña Lopez (2010), participants of this study perceived the effects of internet activities through Nicenet as highly beneficial and therefore showed a high acceptance for Educational Technology application in the process of learning English for international communication.

It is also expressed by the author that most students revealed their views on the benefits of these communication tools in terms of innovation, interactivity, communication, access to information and utility. Additionally, Boloña Lopez (2010) affirms that a good number of students recognized the positive effects of these tools in their process of learning English when he referred to the value of the Internet and Nicenet ICA when working on web-based projects in which they generate, organize and explore ideas and as a result, develop communication skills.

In that way, it is important to emphasize that the use of internet and computers in English learning environments has been highly accepted by many language learners, and participants of this study are not the exception. The idea of implementing internet and computers for learning English throughout the WebQuest strategy was really useful and attractive for all our participants. In general, participants of this study demonstrated high expectations towards using this kind of technology in their process of learning English, aspect that influenced in a very positive way their subsequent performance in the WebQuest activities.

Students' initial expectations involved their desire for learning about animals, improving their level of English but also for getting better in computer technology. The following excerpts from our data show evidence of it:

## Students' interviews at the beginning of the study

*I:* ¿ Qué esperas alcanzar durante todo este proceso?

**P2:** "yo espero mejorar mi nivel de inglés, que pueda entender muchas cosas en ingles, que pueda escribir mejor, que entienda lo que leo y que el plegable me quede muy bien hecho."

**P5:** "aprender mucho sobre los animales y los computadores y el inglés y poder hacer el plegable al final para que me lo escojan."

P2 and P5's responses clearly show they are expecting for favorable results not only in the final task of the WebQuest but also during the whole process of learning English and computer technology through the WebQuest.

**P3:** "bueno yo espero aprender vocabulario y pronunciar bien pero también quiero aprender a escribir mejor en ingles y hablar mucho."

**P6:** "mejorar el inglés, aprender a escribirlo y a leer textos y a entender cuando me hablen."

With regard to P3 and P6's answers, evidently they thought that the Matecaña zoo WebQuest would definitely engage them in a process of meaningful learning of writing, speaking, reading and listening skills. It is significant that such young learners were aware that learning a language does not only include learning vocabulary and pronunciation but also the training in the acquisition of the four skills that structure the domain of a language.

It is important to keep in mind that although P5 and P6 were reported by their regular teacher as low achievers in English and as infrequent volunteers and unwilling participants, they showed enthusiastic thoughts towards the WebQuest, not only before the intervention but also after they having interacted with the materials and activities. After implementing the Matecaña zoo WebQuest, P5 and P6 described their learning experience as very productive and enriching in terms of learning and motivation. P5 and p6 mentioned how this new way of learning allowed them to overcome some fears and difficulties related to language understanding and aversion to participate orally in class. The following excerpts from our data show evidence of it:

## Students' interview at the end of the study

I : ¿Cómo te pareció esta nueva forma de aprender inglés?

**P6**: muy bacana porque la WebQuest tiene muchas actividades e internet, uno no se aburre y aprender es más fácil.

**P5:** para mí fue muy interesante porque aprendí mucho sobre los animales de forma divertida, además ya no me da tanta pena participar en clase.

In the excerpts it can be observed that P5 and P6 stress the support that the varied online activities helped them for acquiring easier and better understanding in an enjoyable and motivating way. P5 also mention that the WebQuest was an effective strategy for improving his low participation in class. This fact gives us an idea of how influential the implementation of the WebQuest was on P6 motivation and development of self-confidence.

In general, the benefits that our participants perceived when working with a WebQuest for learning English align with previous research about the use of internet based tools in the class environments (Mak & Mak, 1995; Revés Ros, 2011). They perceived the online resources and the varied multimedia offered in the WebQuest, as useful tools for they practice and reinforce in an enjoyable and easier way, the linguistic content they were taught before in the classroom.

In addition, participants' perceived the English instruction trough the WebQuest as really valuable for the improvement of their language skills in general. Students expressed how the interaction with the WebQuest helped them to become more proficient in English.

The following excerpts from the interview conducted with the participants at the end of the study offer evidence of participants' positive responses to the question:

# I: ¿Crees que la enseñanza del inglés por medio de la WebQuest te ayudó a mejorar tu nivel de inglés?

P2: si porque ahora sé como decir muchas cosas en ingles que antes no sabía, aprendí las rutinas diarias, las preposiciones, los adjetivos

P3: si porque pude hacer el plegable y exponerlo y me fue muy bien. También aprendí mucho vocabulario, a pronunciar mejor y a escribir buenas oraciones.

As it can be seen in P2 and P3 answers, they are really conscious of the learning gains they reached when using the WebQuest. This fact is really significant for us not only for the students' youth but also because despite their few opportunities to interact with technological resources for learning, participants surprisingly showed to have given a high value to the WebQuest strategy and behaved with great responsibility during their learning process.

Overall, students' answers during the interviews indicated that all of them found the implementation of the Matecaña zoo WebQuest as a highly motivating strategy that enabled them to improve their English level as they learned new linguistic structures and language content about zoo animals. They also expressed to have achieved great gains in vocabulary acquisition, reading comprehension, writing and pronunciation skills as they were able to write and present orally the leaflet in a successfully way. Students' also commented that this new experience of learning English through computers and the internet helped them to develop interest, autonomy and confidence towards their own English learning process.

According to white (1954) in James E, McGlinn & Megan M. McGlinn (2004) the constructivist nature of WebQuest can encourage intrinsic motivation. the author expresses that Students are intrinsically motivated when they do an assignment because it is personally interesting, fulfilling, or enjoyable. Particularly we can say that P5 and P6 found the WebQuest project a very attractive and enhancing

learning strategy which helped them to overcome their low communicative English proficiency presented at the beginning of the study. This type of motivation is correlated with students perceptions that the learning situation is one in which they are competent, exercise control of their learning, and have meaningful associations with others (Spaulding, 1992; Stipek, 2002; McCombs, n.d.).

Finally and according to James E, McGlinn & Megan M. McGlinn (2004) the WebQuest, which provide students with sufficient scaffolding, with choices of roles and topics of study, and with opportunities to work collaboratively with others toward a common goal, lead to intrinsic motivation, and then for a better comprehension and development of the communicative skills in a language.

#### 8. LIMITATIONS OF THE STUDY AND RESEARCH IMPLICATIONS

This research project aimed at observing the impact of the implementation of a WebQuest in a 5<sup>th</sup> grade English classroom. Due to the setting (Colombia) and population selected for the project (students from a low socio-economic status), it can be said that it was a pioneer study because of the innovative use of technology in the English classroom of a public school. However, some limitations were found.

As it happens with qualitative research, particularly when such as reduced number of participants are involved, the conclusions drawn from this study are limited to the population studied. The participants belong to the Colombian low socio economic class, with a high degree of social breakdowns, and little access to the internet and computers for learning, particularly at home. Although the school provides some access and familiarity with computers and the internet within their computer lab, in many cases that is the only opportunity that students have to work with these technologies what might have affected their positive attitudes towards the integration of these technologies in the classroom.

In this respect, it would be interesting to reproduce this study with private education students who usually have a complete access to the internet and computers. Students for whom the usage of technology is a common practice might react indifferently to this teaching strategy. In addition, it would be interesting to develop a research study focused on high or superior education students and with a greater number of participants, so the results from the study can be more securely generalized.

Another limitation was the planning of the English lessons. These were designed with the goal of enhancing students' communicative competence but a problem arose when researchers disregarded the creation of an initial speaking test, which would have helped them to assess and compare the possible changes on the students' speaking skill. Thus the results of the study showed a significant

improvement in writing but, although the researchers observed improvement in students' oral skills, there was no evidence that they could use for supporting it in the findings. For this reason, a research study that took that aspect into account would be very useful for teachers planning to implement this type of strategy.

Due to the technological era we are living in, it is recommended that further research be undertaken using different strategies and technological tools. In this study, a WebQuest was used as technological tool inside the classroom; future research may examine the impact of using others tools in order to study whether the usage of technology can increase students' learning and more generalized results can be obtained about computer assisted language learning.

#### 9. TEACHING IMPLICATIONS

The process of globalization is an issue that directly affects the political, economic, socio-cultural and educational development of a society. Our country is no stranger to these changes; on the contrary we see how the government policies in the educational field are promoting the compliance to international standards of quality and development. Proof of this are the educational innovations that have occurred in recent years, where more importance is given to the need of learning English and computer technology in order to respond competitively to the requirements that these changes demand.

Along with new methodologies for teaching and learning English, the information and communication technologies emerged as support tools that help to optimize and stimulate the educational process, breaking paradigms and displacing many traditional methods, where students were considered as passive containers that could be filled with information.

Without a doubt technology is changing the world we live in, so it is necessary for language teachers to be aware of this reality and find new ways to prepare learners for a more competent world. By combining computers and internet with language instruction, teachers would have the opportunity to encourage students to learn about the target language using real and varied materials.

At the same time, computers give the teachers the opportunity to offer students, through the use of specialized applications and computer-based activities; an environment for interactive learning that can foster the acquisition of communicative skills and place them in similar to real-life situations. One of the great strengths of the Web is the potential to engage students in creative information gap activities and real experiential learning in the form of meaningful, process-oriented projects in authentic settings.

In addition, the use of computer technology in the language classroom fosters student motivation, promotes autonomous learning and stimulates students to take responsibility for their own learning.

Taking into account the above, we should reflect on our role as English teachers and understand that language instruction nowadays should be focused on the implementation of educational strategies that not only promote the acquisition of knowledge, but also the acquisition of significant learning and the development of competences and abilities in learners.

The implementation of this ideal of education is not easy, but it is a commitment that we as teachers must assume if we really want to bring a change to education and society. The English teacher of today should prepare to be competent not only in the domain of a language, but also in didactics where careful planning and organization is needed.

Nowadays, Teachers need to be prepared to offer students learning opportunities supported by ICT. They should be in the capacity of using new technologies as computer and internet to discover how they can contribute to the teaching and learning process.

English teachers need to be prepared to empower students with the advantages that ICTs provide. Schools must require teachers who possess ICT skills and who can effectively integrate this knowledge in the teaching of English.

In addition, English teachers must develop skills to create materials suitable for the new demands of education in the XXI century. Such competences are characterized by fostering greater autonomy in students, increasing the time devoted to the resolution of self-study activities on their own. The materials are no longer supporting the explanation given in class, but should motivate students, and facilitate the acquisition of skills required in the English subject.

As the Matecaña Zoo WebQuest proved to be a useful tool for English learning and for incorporating technology in language instruction, the researchers of this

study recommend teachers to consider the WebQuest strategy as an alternative that can help them to find a curricular space for incorporating technology as part of their teaching. Also, the use of WebQuest can open the door for teachers incorporating other technology tools in teaching while accommodating the needs of new generations of students who are currently or will come into classrooms.

#### 10. CONCLUSIONS

After analyzing the results obtained during the process of investigation, we can say that the WebQuest "Exploring the Matecaña Zoo" proved to be a successful learning strategy for the 5<sup>th</sup> graders of a public school in Pereira Risaralda.

According to data interpretation and analysis, the idea of implementing internet and computers for learning English throughout the WebQuest strategy served as a tool to improve the level of English proficiency of the participants involved in the study, was a useful and innovative technique for English language instruction, and established a direct and collaborative way of learning which allowed students the authentic use of the target language. At the same time, the Matecaña zoo WebQuest helped students to develop critical thinking and analysis skills which served them for improving their linguistic competences.

It is important to highlight that one of the greatest gains of the WebQuest implementation was obtained in the increase of motivation showed by participant 5 and participant 6 as well as their achievement in English skills. This couple of participants were reported by their regular teacher as low achievers in English and as infrequent volunteers and unwilling students. However, during the execution of the project they showed enthusiastic attitudes towards the WebQuest, not only before the intervention but also after having interacted with the materials and activities.

After implementing the Matecaña zoo WebQuest , this pair of participants showed and described their learning experience as very productive and enriching in terms of learning and motivation. They also mentioned how this new way of learning allowed them to overcome some fears and difficulties related to language understanding and aversion to participate orally in class.

For all involved, this technological research project was a totally pleasing experience. The researchers were able to witness the usefulness of implementing a WebQuest for teaching a second a language. In that sense, WebQuests proved

to be a positive step for including technology in English instruction. It also contributed strongly to increase the students' positive attitudes towards English learning.

Finally, the researchers of this study invite English teachers to include the WebQuest in the EFL classroom since it proved to be an exceptional teaching strategy that allows addressing the gaps that sometimes have the traditional teaching and learning processes. Being based on the network and its resources, the webquest not only uses its teaching potential, but also opens a door to the world of digital media and to the benefits this media offers to students with special educational needs. The webquest provides a technological resource that can bring together the students' needs, creating dynamic and flexible learning situations.

#### 11. REFERENCES

- Almekhlafi, AG., (2006). The effect of Computer Assisted Language Learning (CALL) on United Arab Emirates English as a foreign language (EFL) school students' achievement and attitude. <u>Journal of Interactive Learning</u> Research, 17(2), 121-22.
- Benson, T.R. (2004). <u>Integrated teaching units</u>. Retrieved November 20<sup>th</sup>, 2009, from http://www.pbs.org/teachers/earlychildhood/articles/integratedunits.html.
- Boloña, M. (2010). Un estudio de investigación-acción sobre la percepción de los estudiantes sobre el uso de nicenet, un asistente en línea para el aprendizaje del inglés como segunda lengua, en el salón de clase en ecuador. *Revista Calidad en la Educación Superior*, 1(2), 31-45.
- Early, M. (2005). What Are WebQuests and How Do They Affect Achievement? University of North Carolina at Asheville Education Department. Retrieved February 17<sup>th</sup>, 2011, from
- http://www.google.com.co/#hl=es&sa=X&ei=p0RzTpXkEYKbtwelyfygDA&ved=0CBYQvwUoAQ&g=what+are+WebQuest
- +and+how+do+they+affect+achievement%3F&spell=1&fp=a16508c5e45bec49&biw=1024&bih=564
- Fedisson, M., & Braidic, S. (2007). Power point presentations increase achievement and students attitudes towards technology. <u>International Journal of Information and Communication Technology Education</u>, 3(4), 64-75.
- García, A.M. (2008). El uso de las páginas WebQuests como herramienta adicional a la instrucción en el aula, para la enseñanza y aprendizaje del idioma Inglés. ¿Utopía o realidad?¿Conoce usted las páginas WebQuests?. Retrieved May 19th, 2011, from http://guillenininterenglish.blogspot.com/
- Green, T. (2005). Using technology to help English language students develop language skills: a home and school connection. <u>Multicultural Education</u>, <u>13(2)</u>, 56-4.

- Kim, H.K., & Rissel, D. (2008). Instructors' integration of computer technology: examining the role of interaction. <u>Foreign Language Annals</u>, 41(1), 61-81.
- Kuiper, E., Volman, M., & Terwel, Jan. (2005). Students' use of Web literacy skills and strategies: searching, reading and evaluating Web information. Retrieved May 19<sup>th</sup>, 2011, from http://informationr.net/ir/13-3/paper351.html
- Laborda, J.G. (2009). Using WebQuest for oral communication in English as a foreign language for Tourism Studies. <u>Educational Technology & Society, 12</u> (1), 258–270.
- McGlinn, J.E, & McGlinn, M. (2004). The effects of a WebQuest on student attitude, achievement, and literacy in secondary social studies: A Report of Action Research. Retrieved August 9<sup>th</sup>, 2011, from http://docs.google.com/viewer?a=v&q=cache:0xpzlg29eVkJ:facstaff.unca.edu/m cglinn/Effects%2520of%2520webq%2520on%2520achievement%2520and%25 20attitudeRH.doc+Finally+and+according+to+James+E,+McGlinn+%26+Megan+M.+McGlinn+the+WebQuest+,+which+provide+students+with+sufficient+scaffo lding,+with+choices+of+roles+and+topics+of+study,+and+with+opportunities+to+work+collaboratively+with+others+toward+a+common+goal,+lead+to+intrinsic+motivation,+and+then+for+a+better+comprehension+and+development+of+the+communicative+skills+in+a+language.&hl=es&gl=co&pid=bl&srcid=ADGEEShSb8XrqrWzyv9LJSRPRTrEEpxsQc-MWLdX4OK\_mXuUzA\_lfVgHNGfMt2WK4ztRgsalS9SoXjpL-PWRU3sOGos9SOZN1CXtRIJtnpERplmrBX\_sZ8rxdg8UKdvEscMUwOtGuKT2&sig=AHIEtbQZAnzYszR7KPAz-twljgO28CnWvg

Ministerio de Educación Nacional. (2009). Bilinguismo en la educación superior Inglés como lengua extranjera: estrategia para la competitividad. Retrieved October 18th, 2009, from http://www.mineducacion.gov.co/1621/article-196474.html.

- Peterson, M. (2008). Non-native speakers interaction management strategies in a network-based virtual environment. <u>Journal of Interactive Learning Research</u>, 19(1), 91-117.
- Pino, D. (2003). Web-based English as second language instruction: Strenghts and limitations. <u>Distance Education</u>, 5(2), 65-71.

- Hopson, M., Damos, D., & Busath, R. (2005). Using WebQuest with urban students:
  - Merging technology with inquiry and cooperative learning. [on line] available at http://imet.csus.edu/imet7/hopson/arproject/UsingWebQuest withUrbanStudents.pdf retrieved on June, 31<sup>st</sup>, 2011.
- Lin, H., Chen, T., & Applied English Department. (2007). Reading authentic EFL text using visualization and advance organizers in a multimedia learning environment. <u>Language Learning & Technology</u>, 11(3), 83-106.
- Ministerio de Educación Nacional. (2006). Estándares Básicos de Competencias en Lenguas Extranjeras: inglés. Formar en lenguas extranjeras: Inglés !el reto!
- Oliver, R., & Omari, A. (1999). Using online technologies to support problem based learning. Australian Journal of Educational Technology, 15(1), 58-79.
- Pérez, M. (2004). Diseño de WebQuestspara la enseñanza/aprendizaje del inglés como lengua extranjera: Aplicaciones en la adquisición de vocabulario y la destreza lectora; Tesis doctoral. Servicios editoriales de la Universidad de Granada. [on line] available at http://o-hera.ugr.es.adrastea.ugr.es/tesisugr/16171123.pdf retrieved on August, 3<sup>rd</sup>, 2011.
- Redford, J. (2011). Humans and monkeys exert metacognitive control based on learning difficulty in a perceptual categorization task. <u>The Psychological Record.</u> [on line] available at http://findarticles.com/p/articles/mi\_hb3538/is\_4\_60/ai\_n56328294/ webpage retrieved on June, 01<sup>st</sup>, 2011.
- Reiners, P., Renner, K., & Schreiber, J. (2005). The effect of technology integration on student motivation, engagement and interest. <u>Dakota State University.</u> [on line] available at http://kr012.k12.sd.us/Portfolio/Group%20Research%20Paper.pdf. pdf retrieved on April, 15<sup>th</sup>, 2011.

- Réves, M. (2011). Improving grammatical competence in Second Language Spanish using a WebQuest . Retrieved June 8<sup>th</sup> , 2011, from http://www.scss.tcd.ie/~revesm/portfolio/METAPROJECT\_Meritxellreves.pdf
- Tun-Whei, I.C. (2007). The Effects of the WebQuest Writing Instruction Program on
  - EFL Learners' Writing Performance, Writing Apprehension, and Perception. Retrieved May 19<sup>th</sup>, 2011, from http://tesl-ej.org/ej43/a3.pdf
- Vernier, S., Moral, G., Giusti, S., & Barbuzza, S. (2008). The five language skills in the EFL classroom. Retrieved April 6<sup>th</sup>, 2011, from http://bdigital.uncu.edu.ar/2647
- Wikipedia the free encyclopedia (2011), Zone of proximal development. [on line] available at http://en.wikipedia.org/wiki/Zone\_of\_proximal\_development. webpage retrieved on July, 11<sup>th</sup>, 2011.
- Zheng, R. (2011). Multimedia learning environments for early readers. <u>Academic exchange quarterly</u>. [on line] available at http://findarticles.com/p/articles/mi\_hb3325/is\_4\_7/ai\_n29059159/ webpage retrieved on June, 01<sup>st</sup>, 2011.
- Zlatkovska, E. (2010). WebQuestsas a constructivist tool in the EFL teaching methodology class in a University in Macedonia. <u>CORELL: Computer resources</u> for language learning 3, 14-24.

#### 12. APPENDICES

#### APPENDIX A: STUDENTS' INTERVIEW AT THE BEGINNING OF THE STUDY

- ¿Qué opinas acerca de aprender inglés por medio del internet y los computadores?
- ¿Cómo crees que serán las clases de inglés al trabajar con la webquest?
- ¿Qué crees qué será lo más interesante?
- ¿Qué crees que será lo más difícil?
- ¿Qué esperas alcanzar durante todo este proceso?

#### APPENDIX B: STUDENTS' INTERVIEW IN THE MIDDLE OF THE STUDY

- ¿Cómo te has sentido usando la webquest para aprender inglés?
- ¿Cómo ha sido tu desempeño utilizando la webquest?
- ¿Qué expectativas tienes de las próximas clases?
- ¿Qué intereses, curiosidades o dudas tienes?
- ¿Crees que la webquest te ha proporcionado suficiente información sobre el tema que estamos estudiando?
- ¿Prefieres ver las clases de inglés a través de la webquest o de la manera que la profesora siempre lo ha hecho?
- ¿Crees que tienes las habilidades y conocimientos necesarios para tener éxito en el trabajo de la webquest?
- ¿Te ha permitido la webquest trabajar con otros estudiantes de manera eficaz? ¿Por qué?
- ¿Se te dificulta o se te facilita leer y entender el material ofrecido en la webquest? ¿Por qué?
- ¿Entras a la webquest fuera del colegio? ¿Por qué?

### APPENDIX C: STUDENTS' INTERVIEW AT THE END OF THE STUDY

- ¿Crees que la webquest te ayudó a mejorar tu nivel de inglés?
- ¿Cómo te pareció esta nueva forma de aprender inglés?
- ¿Qué aprendiste utilizando los diferentes recursos lingüísticos ofrecidos por la webquest?
- ¿Qué fue lo que más te gusto de trabajar con la webquest para aprender inglés?
- ¿Qué no te gustó de trabajar con la webquest?
- ¿Te sentiste motivado para realizar las diferentes actividades de la webquest?
- ¿Te gustaría seguir usando la webquest en tus clases de inglés?